Indiana Department of Education
SUPPORTING STUDENT SUCCESS

M E M O R A N D U M

TO: Indiana State Board of Education

FROM: Matt Fleck, Director of College and Career Preparation
            Eric Ogle, Business, Marketing and IT Career Preparation Specialist

DATE: September 1, 2010

SUBJECT: Recommendation to Adopt K-12 Technology Standards

The Indiana Department of Education recommends that the State Board of Education formally adopt the International Society for Technology in Education (ISTE) National Educational Technology Standards (NETS) and Performance Indicators for Students. These international standards are being implemented, in some form, in 39 other states. Indiana has used these standards for a number of years to create course standards. With the prevalence of technology in everyday life, it is appropriate for the board to formally adopt the ITSE technology standards.

By adopting these standards:
- A baseline expectation is created for all students and schools to meet. Students that are proficient in technology will be better prepared to move into careers or higher education.
- Teachers will have a standardized guide for including technology in the curriculum.
- Indiana students will be better prepared for the 2014 NAEP Technology and Engineering Literacy Assessment.

The International Society for Technology in Education (ISTE) National Educational Technology Standards (NETS) and Performance Indicators for Students

Standard 1.0 Creativity and Innovation
Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
TECH-1.1 Apply existing knowledge to generate new ideas, products, or processes.
TECH-1.2 Create original works as a means of personal or group expression.
TECH-1.3 Use models and simulations to explore complex systems and issues.
TECH-1.4 Identify trends and forecast possibilities.

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Standard 2.0 Communication and Collaboration

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

TECH-2.1 Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.

Standard 2.0 Communication and Collaboration (Continued)

TECH-2.2 Communicate information and ideas effectively to multiple audiences using a variety of media and formats.

TECH-2.3 Develop cultural understanding and global awareness by engaging with learner of other cultures.

TECH-2.4 Contribute to project teams to produce original works or solve problems.

Standard 3.0 Research and Information Fluency

Students apply digital tools to gather, evaluate, and use information.

TECH-3.1 Plan strategies to guide inquiry.

TECH-3.2 Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.

TECH-3.3 Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.

TECH-3.4 Process data and report results.

Standard 4.0 Critical Thinking, Problem Solving, and Decision Making

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

TECH-4. Identify and define authentic problems and significant questions for investigation.

TECH-4. Plan and manage activities to develop a solution or complete a project.

TECH-4. Collect and analyze data to identify solutions and/or make informed decisions.

TECH-4. Use multiple processes and diverse perspectives to explore alternative solutions.

Standard 5.0 Digital Citizenship

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

TECH-5. Advocate and practice safe, legal, and responsible use of information and technology.

TECH-5. Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.

TECH-5. Demonstrate personal responsibility for lifelong learning.

TECH-5. Exhibit leadership for digital citizenship.

Standard 6.0 Technology Operations and Concepts

Students demonstrate a sound understanding of technology concepts, systems, and operations.

TECH-6. Understand and use technology.

TECH-6. Select and use applications effectively and productively.

TECH-6. Troubleshoot systems and applications.

TECH-6. Transfer current knowledge to learning of new technology.